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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/541,278

**Applicant(s)**

SAKO ET AL.

**Examiner**

BEN H. LIU

**Art Unit**

2416

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,6-11, 14-19, 22-28 and 31-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-11, 14-19, 22-28 and 31-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. This office action is in response to an amendment/response filed on January 12<sup>th</sup>, 2009.
2. Claims 26, 40, and 45 have been amended.
3. Claims 4-5, 12-13, 20-21, 29-30, and 58 were previously cancelled.
4. No claims have been added.
5. Claims 1-3, 6-11, 14-19, 22-28, 31-57 and 59 are currently pending.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-3, 6-11, 14-19, 22-28, 31-52 and 59 are rejected under 35 U.S.C. 102(e) as being anticipated by Fernandez et al. (U.S. Patent 6,922,664).

**For claim 1**, Fernandez et al. discloses an information transmission method, comprising:  
acquiring one or more of audio information and video information of a performance at a given location (*see figure 2, which recite a microphone 44 and camera 42 for providing audio and visual information*);

detecting, concurrent with the acquiring of the one or more of audio information and video information, bio-information of at least one individual participator present at the given location (*see figure 2 and figure 4, which recite a biometric sensor array module 50 that measures bio-information*);

packetizing multiplexed with respect to the acquired one or more of audio information and video information into a stream of data packets (*see column 1 lines 62-65 and figure 2, which recite connecting client 20 with network interface 24 used to transmit audio and video information gathered by microphone 44 and camera 42 to network 10 using TCP/IP packets*);

multiplexing the stream of data packets with corresponding portions of the detected bio-information (*see column 4 lines 8-19, which recite generating digital packets using the bio-information signals collected by the a biometric sensor array module 50*)

by inserting a respective portion of the detected bio-information adjacent to at least one data packet that is concurrent with that portion of the bio-information (*see column 7 lines 1-9, which recite real-time exchange of live video-conferencing between clients for the multi-sensor network including bio-information from the multi-sensor signals wherein real-time exchange requires that bio-information packets are transmitted concurrently with the audio and video information*); and

transmitting the multiplexed stream (*see figure 5b, which recites a communication module 94 that transmits signals from the sensors*).

**For claim 2**, Fernandez et al. discloses an information transmission method, wherein the at least one individual includes a speaker, a player, an actor, an actress, or a conductor who serves as a source of the audio information, and/or a performer or a photographed person who is

included within the video information (*see column 7 lines 1-9, which recite real-time conference that transmits information of the speaker including bio-information gathered from multi-sensor array 50*).

**For claim 3**, Fernandez et al. discloses an information transmission method, wherein the at least one individual includes a listener who is present at the given location place when the audio information is acquired and/or a viewer present at the given location when the video information is acquired (*see column 7 lines 1-9, which recite real-time conference that transmits information of the listener including bio-information gathered from multi-sensor array 50*).

**For claim 6**, Fernandez et al. discloses an information transmission method, wherein the at least one data packet is a plurality of data packets associated with a time period of a predetermined length; and the multiplexing step includes performing statistical processing of the corresponding portions of the bio-information to calculate corresponding portions of statistical bio-information and inserting a respective portion of the statistical bio-information adjacent to the plurality of data packets that is concurrent with that portion of the statistical bio-information (*see column 7 lines 1-9, which recite real-time exchange of live video between clients wherein real-time exchange requires that bio-information packets are transmitted adjacent to audio and video information*).

**For claim 7**, Fernandez et al. discloses an information transmission method, wherein the bio-information is selected from the group consisting of body motion, myoelectricity, body surface temperature, skin sweating, skin pressure, pulse, breath, micro-vibration, cardioelectricity, heartbeat, and blood pressure (*see column 4 lines 20-29, which recite detecting*

*temperature, pressure, physiological vital information such as pulse and blood pressure using the multi-sensor module 50).*

**For claim 8,** Fernandez et al. discloses an information transmission method, wherein the detected bio-information is extracted from the one or more of audio information and video information (*see column 6 lines 22-25, which recite extracting facial imaging biometric information from video information gathered at client 20*).

**For claim 9,** Fernandez et al. discloses an information transmission information acquiring means for acquiring:

one or more of audio information and video information of a performance at a given location (*see figure 2, which recite a microphone 44 and camera 42 for providing audio and visual information*);

bio-information detecting means for detecting concurrent with the acquiring of the one or more of audio information and video information, bio-information of at least one individual present at the given location (*see figure 2 and figure 4, which recite a biometric sensor array module 50 that measures bio-information*); and

transmission means for packetizing the acquired one or more of audio information and video information into a stream of data packets (*see column 1 lines 62-65 and figure 2, which recite connecting client 20 with network interface 24 used to transmit audio and video information gathered by microphone 44 and camera 42 to network 10 using TCP/IP packets*)

for multiplexing the stream of data packets with corresponding bio-information (*see column 4 lines 8-19, which recite generating digital packets using the bio-information signals collected by the a biometric sensor array module 50*)

by inserting a respective portion of the detected bio-information adjacent to at least one data packet that is concurrent with that portion of the bio-information (*see column 7 lines 1-9, which recite real-time exchange of live video between clients for the multi-sensor network including bio-information from the multi-sensor signals wherein real-time exchange requires that bio-information packets are transmitted concurrently with the audio and video information*), and for transmitting the multiplexed stream (*see figure 5b, which recites a communication module 94 that transmits signals from the sensors*).

**For claim 10**, Fernandez et al. discloses an information transmission information acquiring means wherein the at least one individual includes a speaker, a player, an actor, or a conductor who serves as a source of the audio information, and/or a performer or a photographed person who is included within the video information (*see column 7 lines 1-9, which recite real-time conference that transmits information of the speaker including bio-information gathered from multi-sensor array 50*).

**For claim 11**, Fernandez et al. discloses an information transmission information acquiring means wherein the at least one individual includes a listener who is present at the given location when the audio information is acquired and/or a viewer present at the given location place when the video information is acquired (*see column 7 lines 1-9, which recite real-time conference that transmits information of the listener including bio-information gathered from multi-sensor array 50*).

**For claim 14**, Fernandez et al. discloses an information transmission information acquiring means wherein the at least one data packet is a plurality of data packets associated with a time period of a predetermined length, and the transmission means performs statistical

processing of the corresponding portions of the bio-information to calculate corresponding portions of statistical bio-information and inserts a respective portion of the statistical bio-information adjacent to the plurality of data packets that is concurrent with that portion of the statistical bio-information (*see column 7 lines 1-9, which recite real-time exchange of live video between clients wherein real-time exchange requires that bio-information packets are transmitted adjacent to audio and video information*).

**For claim 15**, Fernandez et al. discloses an information transmission information acquiring means wherein the bio-information is selected from the group consisting of body motion, myoelectricity, body surface temperature, skin sweating, skin resistance, pulse, breath, micro-vibration, cardioelectricity, heartbeat, and blood pressure (*see column 4 lines 20-29, which recite detecting temperature, pressure, physiological vital information such as pulse and blood pressure using the multi-sensor module 50*).

**For claim 16**, Fernandez et al. discloses an information transmission information acquiring means wherein the bio-information detecting means extracts the detected bio-information from the one or more of audio information and video information (*see column 6 lines 22-25, which recite extracting facial imaging biometric information from video information gathered at client 20*).

**For claim 17**, Fernandez et al. discloses an information recording method, comprising: acquiring one or more audio information and video information (*see figure 2, which recite a microphone 44 and camera 42 for providing audio and visual information*);



detecting, concurrent with the acquiring of the one or more of audio information and video information, bio- information of at least one individual present at the given (*see figure 2 and figure 4, which recite a biometric sensor array module 50 that measures bio-information*);

packetizing the acquired one or more of audio information and video information into a stream of data packets (*see column 1 lines 62-65 and figure 2, which recite connecting client 20 with network interface 24 used to transmit audio and video information gathered by microphone 44 and camera 42 to network 10 using TCP/IP packets*);

multiplexing the stream of data packets with corresponding portions of the detected bio-information (*see column 4 lines 8-19, which recite generating digital packets using the bio-information signals collected by the a biometric sensor array module 50*)

by inserting a respective portion of the detected bio- information adjacent to at least one data packet that is concurrent with that portion of the bio-information (*see column 7 lines 1-9, which recite real-time exchange of live video between clients for the multi-sensor network including bio-information from the multi-sensor signals wherein real-time exchange requires that bio-information packets are transmitted concurrently with the audio and video information*);  
and

recording the multiplexed stream onto a predetermined recording medium (*see column 3 lines 1-17, which recite a memory implement on a semiconductor for storing sensed signals*).

**For claim 18,** Fernandez et al. discloses an information recording method wherein the at least one individual includes a speaker, a player, an actor, or conductor who serves as a source of the audio information, and/or a performer or a photographed person who is included within the

video information *(see column 7 lines 1-9, which recite real-time conference that transmits information of the speaker including bio-information gathered from multi-sensor array 50).*

**For claim 19**, Fernandez et al. discloses an information recording method wherein the at least one individual includes a listener who is present at the given location when the audio information is acquired and/or a viewer present at the given location when the video information is acquired *(see column 7 lines 1-9, which recite real-time conference that transmits information of the listener including bio-information gathered from multi-sensor array 50).*

**For claim 22**, Fernandez et al. discloses an information recording method wherein the at least one data packet is a plurality of data packets associated with a time period of a predetermined length; and the multiplexing step includes performing statistical processing of the corresponding portions of the bio-information to calculate corresponding portions of statistical bio-information and inserting a respective portion of the statistical bio-information adjacent to the plurality of data packets that is concurrent with that portion of the statistical bio- information *(see column 7 lines 1-9, which recite real-time exchange of live video between clients wherein real-time exchange requires that bio-information packets are transmitted adjacent to audio and video information).*

**For claim 23**, Fernandez et al. discloses an information recording method wherein the bio-information is selected from the group consisting of body motion, myoelectricity, body surface temperature, skin sweating, skin resistance, pulse, breath, micro-vibration, cardioelectricity, heartbeat, and blood pressure *(see column 4 lines 20-29, which recite detecting*

*temperature, pressure, physiological vital information such as pulse and blood pressure using the multi-sensor module 50).*

**For claim 24,** Fernandez et al. discloses an information recording method wherein the detected the recording medium is at least one of optical disc, magnetic tape, hard disc and semiconductor memory (*see column 3 lines 1-17, which recite a memory implement on a semiconductor for storing sensed signals*).

**For claim 25,** Fernandez et al. discloses an information recording method wherein the bio-information is extracted from the one or more of audio information and video information (*see column 6 lines 22-25, which recite extracting facial imaging biometric information from video information gathered at client 20*).

**For claim 26,** Fernandez et al. discloses an information recording method, comprising:  
information acquiring means for acquiring one or more of audio information and~ video information of a performance at a given location (*see figure 2, which recite a microphone 44 and camera 42 for providing audio and visual information*);

bio-information detecting means for detecting concurrent with the acquiring of the one or more of audio information and video information, bio-information of at least one individual present at the given location (*see figure 2 and figure 4, which recite a biometric sensor array module 50 that measures bio-information*); and

recording means for packetizing the acquired one or more of audio information and video information into a stream of data packets (*see column 1 lines 62-65 and figure 2, which recite connecting client 20 with network interface 24 used to transmit audio and video information gathered by microphone 44 and camera 42 to network 10 using TCP/IP packets*),

for multiplexing the stream of data packets with corresponding bio-information (*see column 4 lines 8-19, which recite generating digital packets using the bio-information signals collected by the a biometric sensor array module 50*)

by inserting a respective portion of the detected bio-information adjacent to at least one data packet that is concurrent with that portion of the bio-information (*see column 7 lines 1-9, which recite real-time exchange of live video between clients for the multi-sensor network including bio-information from the multi-sensor signals wherein real-time exchange requires that bio-information packets are transmitted concurrently with the audio and video information*), and

for recording the multiplexed stream onto a predetermined recording medium (*see column 3 lines 1-17, which recite a memory implement on a semiconductor for storing sensed signals*).

**For claim 27**, Fernandez et al. discloses an information recording method wherein the at least one individual includes a speaker, a player, an actor, or a conductor who serves as a source of the audio information, and/or a performer or a photographed person who is included within the video information (*see column 7 lines 1-9, which recite real-time conference that transmits information of the speaker including bio-information gathered from multi-sensor array 50*).

**For claim 28**, Fernandez et al. discloses an information recording method wherein the at least one individual includes a listener who is present at the given location when the audio information is acquired and/or a viewer present at the given location when the video information is acquired (*see column 7 lines 1-9, which recite real-time conference that transmits information of the listener including bio-information gathered from multi-sensor array 50*).

**For claim 31,** Fernandez et al. discloses an information recording method wherein the at least one data packet is a plurality of data packets associated with a time period of a predetermined length, and the recording means performs statistical processing of the corresponding portions of the bio-information to calculate corresponding portions of statistical bio-information to record and inserts a respective portion of the statistical bio-information adjacent to the plurality of data packets that is concurrent with that portion of the statistical bio-information (*see column 7 lines 1-9, which recite real-time exchange of live video between clients wherein real-time exchange requires that bio-information packets are transmitted adjacent to audio and video information*).

**For claim 32,** Fernandez et al. discloses an information recording method wherein the bio-information is at least one selected from the group consisting of body motion, myoelectricity, body surface temperature, skin sweating, skin resistance, pulse, breath, micro-vibration, cardioelectricity, heartbeat, and blood pressure (*see column 4 lines 20-29, which recite detecting temperature, pressure, physiological vital information such as pulse and blood pressure using the multi-sensor module 50*).

**For claim 33,** Fernandez et al. discloses an information recording method wherein the recording medium is selected from the group consisting of optical disc, magnetic tape, hard disc, and semiconductor memory (*see column 3 lines 1-17, which recite a memory implement on a semiconductor for storing sensed signals*).

**For claim 34,** Fernandez et al. discloses an information recording method wherein the bio-information detecting means extracts the detected bio-information from the one or more of

audio information and video information (*see column 6 lines 22-25, which recite extracting facial imaging biometric information from video information gathered at client 20*).

**For claim 35**, Fernandez et al. discloses an information reproducing method, comprising:  
decomposing a multiplexed data stream into data packets of one or more of audio information and video information and corresponding portions of bio- information (*see figure 2, which recites client 20 including network interface 24 for receiving a data stream that are distributed to the display 32, audio device 46, and mechanical device 48*),

the multiplexed data stream having a respective portion of the bio-information disposed adjacent to at least one concurrent data packet (*see column 7 lines 1-9, which recite real-time exchange of live video between clients for the multi-sensor network including bio-information from the multi-sensor signals wherein real-time exchange requires that bio-information packets are transmitted adjacent to audio and video information*),

the one or more of audio information and video information being acquired at a performance at a given location (*see figure 2, which recite a microphone 44 and camera 42 for providing audio and visual information*),

the bio-information being of at least one individual present at the given location and being detected concurrent with the acquiring of the one or more of audio information and video information (*see column 7 lines 1-9, which recite real-time conference that concurrently transmits information including bio-information gathered from multi-sensor array 50*);

reproducing the one or more of audio information and video information for delivery to a user and providing, to the user, sense stimulation based on the bio-information concurrent with the delivery of the one or more of the audio information and video information (*see figure 5A*

*and column 6 lines 35-42, which recite simulator module 90 for reproducing the data stream containing audio, video, and bio-information data streams).*

**For claim 36,** Fernandez et al. discloses an information reproducing method wherein the multiplexed data stream is received through a transmission method *(see figure 2, which recites a client 20 that uses network interface 24 for receiving the sensed data stream).*

**For claim 37,** Fernandez et al. discloses an information reproducing method wherein the multiplexed data stream is read out from a recording medium *(see column 3 lines 1-17, which recite a memory implement on a semiconductor for reading out sensed signals).*

**For claim 38,** Fernandez et al. discloses an information reproducing method wherein the at least one individual includes a speaker, a player, an actor or conductor who serves as a source of the audio information, and/or a performer or a photographed person who is included within the video information *(see column 7 lines 1-9, which recite real-time conference that transmits information of the speaker including bio-information gathered from multi-sensor array 50).*

**For claim 39,** Fernandez et al. discloses an information reproducing method wherein the at least one individual includes a listener present at the given location when the audio information is acquired and/or a viewer present at the given location when the video information is acquired *(see column 7 lines 1-9, which recite real-time conference that transmits information of the listener including bio-information gathered from multi-sensor array 50).*

**For claim 40,** Fernandez et al. discloses an information reproducing method comprising:  
decomposing a multiplexed data stream into data packets of one or more of audio information and video information and into corresponding portions of bio- information *(see*

*figure 2, which recites client 20 including network interface 24 for receiving a data stream that are distributed to the display 32, audio device 46, and mechanical device 48),*

*the multiplexed data stream having a respective portion of the bio-information disposed adjacent to at least one concurrent data packet (see column 7 lines 1-9, which recite real-time exchange of live video between clients for the multi-sensor network including bio-information from the multi-sensor signals wherein real-time exchange requires that bio-information packets are transmitted adjacent to audio and video information),*

*the one or more of audio information and video information being acquired at a performance at a given location (see figure 2, which recite a microphone 44 and camera 42 for providing audio and visual information),*

*the bio-information being of at least one individual present at the given location and being detected concurrent with the acquiring of the one or more of audio information and video information (see column 7 lines 1-9, which recite real-time conference that concurrently transmits information including bio-information gathered from multi-sensor array 50); and*

*controlling, based on the bio-information, reproduction of the one or more of audio information and video information (see column 6 lines 22-25, which controlling access to video information for reproduction based upon facial imaging biometric information).*

**For claim 41,** Fernandez et al. discloses an information reproducing method wherein the multiplexed data stream is received through a transmission medium (*see figure 2, which recites a client 20 that uses network interface 24 for receiving the sensed data stream*).

**For claim 42,** Fernandez et al. discloses an information reproducing method



wherein the multiplexed data stream is read out from a record medium (*see column 3 lines 1-17, which recite a memory implement on a semiconductor for reading out sensed signals*).

**For claim 43**, Fernandez et al. discloses an information reproducing method wherein the at least one individual includes a speaker, a player, an actor, or conductor who serves as a source of the audio information, and/or a performer or a photographed person who is included within the video information (*see column 7 lines 1-9, which recite real-time conference that transmits information of the speaker including bio-information gathered from multi-sensor array 50*).

**For claim 44**, Fernandez et al. discloses an information reproducing method wherein the at least one individual includes a listener present at the given location place when the audio information is acquired and/or a viewer present at the given location place when the video information is acquired (*see column 7 lines 1-9, which recite real-time conference that transmits information of the listener including bio-information gathered from multi-sensor array 50*).

**For claim 45**, Fernandez et al. discloses an information reproducing apparatus comprising:

means for decomposing a multiplexed data stream into data packets one or more of audio information and video information and into corresponding portions of bio- information (*see figure 2, which recites client 20 including network interface 24 for receiving a data stream that are distributed to the display 32, audio device 46, and mechanical device 48*),

the stream of data packets having a respective portion of the bio-information disposed adjacent to at least one concurrent data packet (*see column 7 lines 1-9, which recite real-time exchange of live video between clients for the multi-sensor network including bio-information*

*from the multi-sensor signals wherein real-time exchange requires that bio-information packets are transmitted adjacent to audio and video information),*

the one or more of audio information and video information being acquired at a performance at a given location (*see figure 2, which recite a microphone 44 and camera 42 for providing audio and visual information*),

the bio-information being of at least one individual present at the given location and being detected concurrent with the acquiring of the one or more of audio information and video information (*see column 7 lines 1-9, which recite real-time conference that concurrently transmits information including bio-information gathered from multi-sensor array 50*);

means for reproducing the one or more of audio information and video information for delivery to a user; and means for providing, to the user, sense stimulation based on the bio-information concurrent with the delivery of the one or more of the audio information and video information (*see figure 5A and column 6 lines 35-42, which recite simulator module 90 for reproducing the data stream containing audio, video, and bio-information data streams*).

**For claim 46,** Fernandez et al. discloses an information reproducing apparatus further comprising: means for receiving the multiplexed data stream through a transmission medium (*see figure 2, which recites a client 20 that uses network interface 24 for receiving the sensed data stream*).

**For claim 47,** Fernandez et al. discloses an information reproducing apparatus further comprising: means for reading out the multiplexed data stream from a recording medium (*see column 3 lines 1-17, which recite a memory implement on a semiconductor for reading out sensed signals*).

**For claim 48**, Fernandez et al. discloses an information reproducing apparatus wherein the at least one individual includes a speaker, a player, an actor, or a conductor who serves as a source of the audio information, and/or a performer or a photographed person who is included within the video information (*see column 7 lines 1-9, which recite real-time conference that transmits information of the speaker including bio-information gathered from multi-sensor array 50*).

**For claim 49**, Fernandez et al. discloses an information reproducing apparatus wherein the at least one individual includes a listener present at the given location when the audio information is acquired and/or a viewer present at the given location when video information is acquired (*see column 7 lines 1-9, which recite real-time conference that transmits information of the listener including bio-information gathered from multi-sensor array 50*).

**For claim 50**, Fernandez et al. discloses an information reproducing apparatus comprising:

means for decomposing a multiplexed data stream into data packets one or more of audio information and video information and into corresponding portions of bio- information (*see figure 2, which recites client 20 including network interface 24 for receiving a data stream that are distributed to the display 32, audio device 46, and mechanical device 48*),

the stream of data packets having a respective portion of the bio-information disposed adjacent to at least one concurrent data packet (*see column 7 lines 1-9, which recite real-time exchange of live video between clients for the multi-sensor network including bio-information from the multi-sensor signals wherein real-time exchange requires that bio-information packets are transmitted adjacent to audio and video information*),

the one or more of audio information and video information being acquired at a performance at a given location (*see figure 2, which recite a microphone 44 and camera 42 for providing audio and visual information*),

the bio-information being detected concurrent with the acquiring of the one or more of audio information and video information (*see column 7 lines 1-9, which recite real-time conference that concurrently transmits information including bio-information gathered from multi-sensor array 50*); and

means for controlling, based on the bio-information reproduction of the one or more of audio information and video information (*see column 6 lines 22-25, which controlling access to video information for reproduction based upon facial imaging biometric information*).

**For claim 51**, Fernandez et al. discloses an information reproducing apparatus further comprising: means for receiving the multiplexed data stream through a transmission medium (*see figure 2, which recites a client 20 that uses network interface 24 for receiving the sensed data stream*).

**For claim 52**, Fernandez et al. discloses an information reproducing apparatus further comprising: means for reading out the multiplexed data stream from a recording medium (*see column 3 lines 1-17, which recite a memory implement on a semiconductor for reading out sensed signals*).

**For claim 53**, Fernandez et al. discloses an information reproducing apparatus wherein the at least one individual includes a speaker, a player, an actor, or a conductor who serves as a source of the audio information, and/or a performer or a photographed person who is included within the video information (*see column 7 lines 1-9, which recite real-time conference that*

*transmits information of the speaker including bio-information gathered from multi-sensor array 50).*

**For claim 54**, Fernandez et al. discloses an information reproducing apparatus wherein the at least one individual includes a listener present at the given location when the audio information is acquired and/or a viewer present at the given location when the video information is acquired (*see column 7 lines 1-9, which recite real-time conference that transmits information of the listener including bio-information gathered from multi-sensor array 50).*

**For claim 55**, Fernandez et al. discloses a recording medium having recorded therein a multiplexed data stream comprised of data packets of one or more of audio information and video information and comprised of corresponding portions of bio-information (*see figure 2, which recite networked client 20 with network interface 24 and storage 28 for receiving video-conference data including bio-information).*

the multiplexed data stream having a respective portion of the bio-information disposed adjacent to at least one concurrent data packet (*see column 7 lines 1-9, which recite real-time exchange of live video between clients for the multi-sensor network including bio-information from the multi-sensor signals wherein real-time exchange requires that bio-information packets are transmitted adjacent to audio and video information).*

the one or more of audio information and video information being acquired at a performance at a given location (*see figure 2, which recite a microphone 44 and camera 42 for providing audio and visual information).*

the bio-information being of at least one individual present at the given location and being detected concurrent with the acquiring of the one or more of audio information and video

information (*see column 7 lines 1-9, which recite real-time conference that concurrently transmits information including bio-information gathered from multi-sensor array 50*).

**For claim 56**, Fernandez et al. discloses a recording medium having recorded wherein least one individual includes a speaker, a player, an actor, or a conductor who serves as a source of the audio information, and/or a performer or a photographed person who is included within the video information (*see column 7 lines 1-9, which recite real-time conference that transmits information of the speaker including bio-information gathered from multi-sensor array 50*).

**For claim 57**, Fernandez et al. discloses a recording medium having recorded wherein the at least one individual includes a listener present at the given location when the audio information is acquired and/or a viewer present at the given location place when the video information is acquired (*see column 7 lines 1-9, which recite real-time conference that transmits information of the listener including bio-information gathered from multi-sensor array 50*).

**For claim 59**, Fernandez et al. discloses a recording medium having recorded wherein the bio-information is selected from the group consisting at least one of body motion, myoelectricity, body surface temperature, skin sweating, skin resistance, pulse, breath, micro-vibration, cardioelectricity, heartbeat, and blood pressure (*see column 4 lines 20-29, which recite detecting temperature, pressure, physiological vital information such as pulse and blood pressure using the multi-sensor module 50*).

#### ***Response to Arguments***

8. It is noted with appreciation that the Applicant has carefully considered the prior art rejections of the pending claims. The Applicant's arguments filed January 12th, 2009 regarding

the 35 USC 102(e) rejection for the pending claims have been fully considered but they are not persuasive.

First, the Applicant notes that, “digital packets of intelligently determined conditions are generated and that such intelligently determined conditions may be generated as more concise findings, flags, warnings, or other indications provided as feedback” (*see Applicant’s remarks, page 15 lines 7-11*). The Applicant asserts, “such intelligently determined conditions are not considered collected bio-information signals” (*see Applicant’s remarks, page 15 lines 11-13*).

The Examiner notes the distinction made by the Applicant between the intelligently determined conditions and bio-information signals. However, it is also noted that the concise findings, flags, warnings, or other indications of the intelligently determined conditions as disclosed by Fernandez et al. can be interpreted to consist of bio-information measured by sensor 88 that are transmitted in a condensed format (i.e. “concise findings”). Additionally, the measured bio-information may be processed to be represented as flags or other indications as recited by Fernandez et al. Such condensed forms of the bio-information are suitable for transmission as digital packet, datagram, frame, or other capsulated format (*see Fernandez et al., column 4 lines 10-11*). Therefore, the concise findings, flags, and other indications that are transmitted in digital packets as recited by Fernandez et al. represent the portions of the detected bio-information that are transmitted as recited by the independent claims. Even if it is argued that the intelligently determined conditions do not represent the bio-information signals in a condensed format, the Applicant acknowledges that “the biometric sensor feedback data signal is provided optionally by the interface 80” (*see Applicant’s remarks, page 15 lines 19-21*), wherein interface 80 allows packet transmission of the bio-information. Therefore, using the broadest

reasonable interpretation, the detected bio-information is transmitted with the data packets as recited by the independent claims.

Second, the Applicant argues that, “inserting a respective portion of detected bio-information adjacent to at least one data packet that is concurrent with that portion of the bio-information is neither inherent to such real-time transmission nor obvious.” However, it is noted that bio-information is transmitted to enhance real-time video-conferencing communication (*see Fernandez et al., column 7 lines 1-9*). If the bio-information is not transmitted concurrently with adjacent audio or video information, then the bio-information must be transmitted before or after the video or audio information is transmitted. However, all of the audio, video, and bio-information must be available in order to usefully reproduce signals for video-conferencing. For instance, a video-conference user who views the image of the user at the opposite end speaking but hears the corresponding words many seconds later would find the conference disorienting. Similarly, a user who views the image of the user at the opposite end speaking but experiences the corresponding bio-information many seconds later would also find the conference disorienting. Thus, reproduction of the signals must be delayed until all of the audio, video, and bio-information are available for reproduction. However, this delay would prevent the system from providing real-time video-conferencing as disclosed by Fernandez et al. Therefore, the detected bio-information as taught by Fernandez et al. must be transmitted concurrently with corresponding audio and video data as recited in the independent claims.

For at least the reasons provided above, the Applicant’s arguments regarding the independent claims are not persuasive. The applicant further argues that the remaining claims are patentable at least by virtue of their dependencies. Since the Applicant’s arguments regarding



independent claims are not persuasive, the Applicant's arguments regarding the dependent claims are also not persuasive.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BEN H. LIU whose telephone number is (571)270-3118. The examiner can normally be reached on 9:00AM to 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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